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DDI Extensions for Qualitative Data NADDI 2013

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Overview

- Introduction and History
- The Challenge of Qualitative Data
- The Current Model
- Looking Ahead

Introduction and History

The Qualitative Landscape

- Qualitative methods are rapidly evolving, and are viewed very differently in different countries
 - In the UK, qualitative research is a major aspect of social science research – lots of advanced methodological innovation
 - In other parts of Europe, it is seen as a serious activity, although not always taken as seriously as in the UK
 - In the US, it seems not to be taken as seriously
- The members of this group in DDI represent many different cultures around qualitative data
 - They all have requirements needing to be met

Timetable

- Start January 2010 –
- First meeting, 19 April 2010;
- Gothenburg working meeting December 2011;
- Bergen working meeting November 2012

Participants

Convenor: Arofan Gregory, Metadata Technology

Chair: Louise Corti, UK Data Archive

Architects: Larry Hoyle, University of Kansas, and Agustina Martinez, Liverpool John Moores University

Observer: Joachim Wackerow, GESIS

Members:

Eirik Alvar, Norwegian Social Science Data Service (NSD)

Steve McEachern, Australia Data Archive

Cornelia Zuell, GESIS

Damien Gallagher, National University of Maynooth, Ireland

Tobias Gebel, University Bielefeld

Jani Hautamaki, Finnish Data Archive

Arja Kuula, Finnish Data Archive

Iris Braun, University of Bielefeld

Noemi Betancort, University of Bremen

The Challenge of Qualitative Data

What are Qualitative Data?

- Text (with an emphasis on transcripts of interviews and focus groups)
- Images
- Video
- Audio
- More...

Three Scenarios

- Documentation at the object level
- Segments of objects need documentation
 - E.g. CAQDAS – codes associated with defined segments
- Segments have documentation and quantitative data have been generated from the qualitative segments
 - E.g. text mining

Segments Example

KU Alumni Center
NADDI 2013 Dinner site

Kansas Union
NADDI 2013 Conference Site
Qualitative Presentation here

Larry's Office



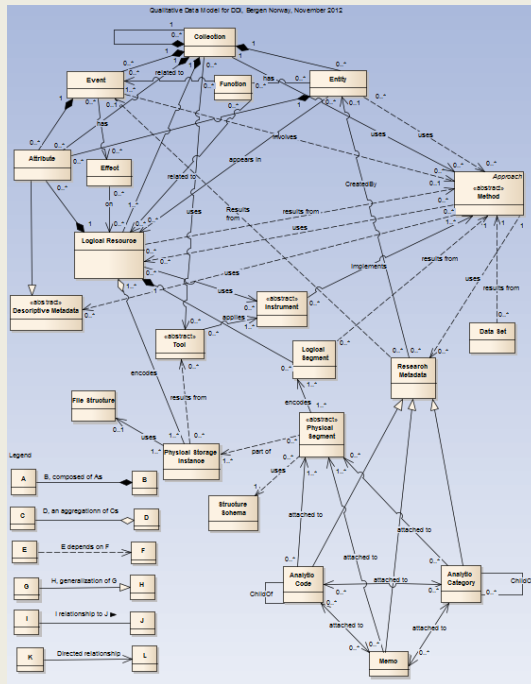
Some Considerations

- Qualitative data are often associated with events
 - In the real world (the event being studied)
 - In the conduct of a study (interview, focus group, etc.)
- Qualitative data are often associated with specific people
 - The person being studied
 - Someone of significance to the person being interviewed
 - The people doing the study itself

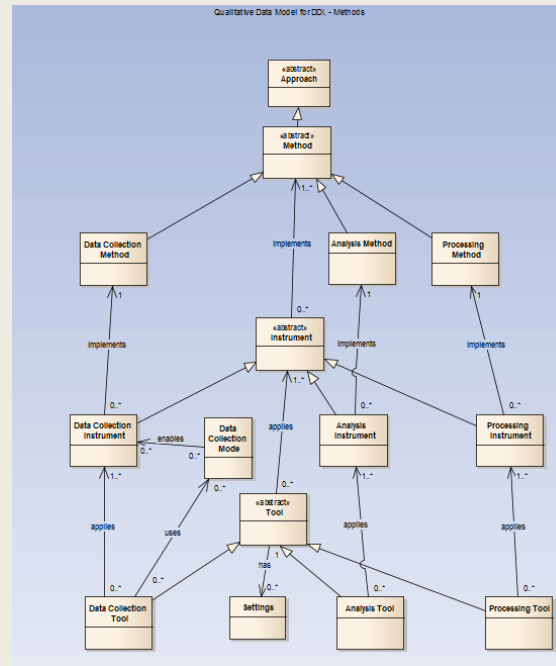
This is difficult...

- We are being asked to document *everything*
 - Except for quantitative data...
 - But sometimes even that (!)

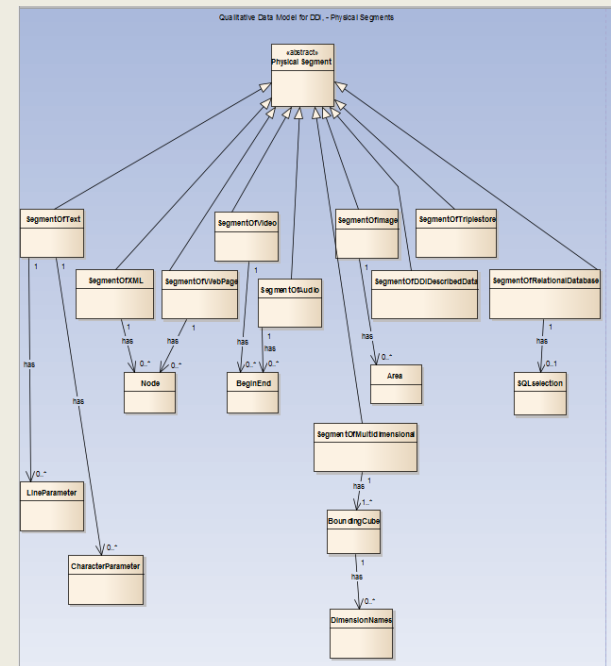
Current Model



Overall model

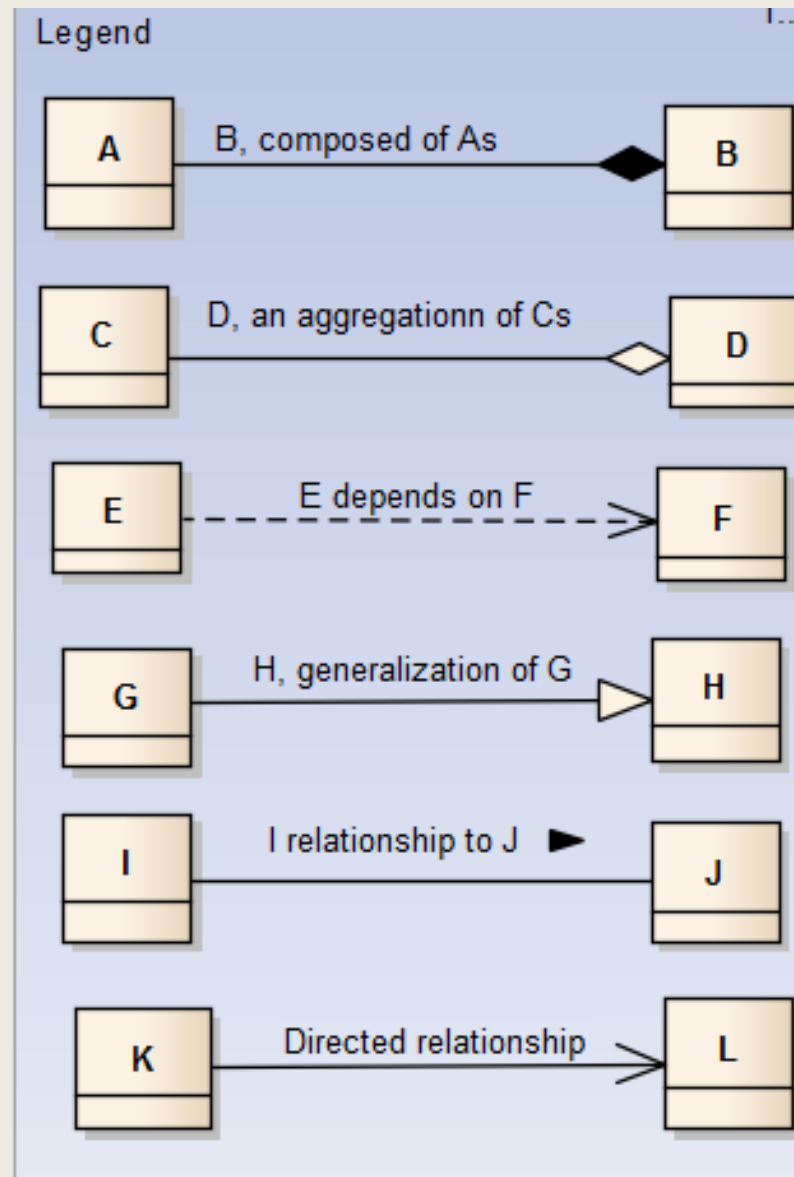


Methods and Instruments

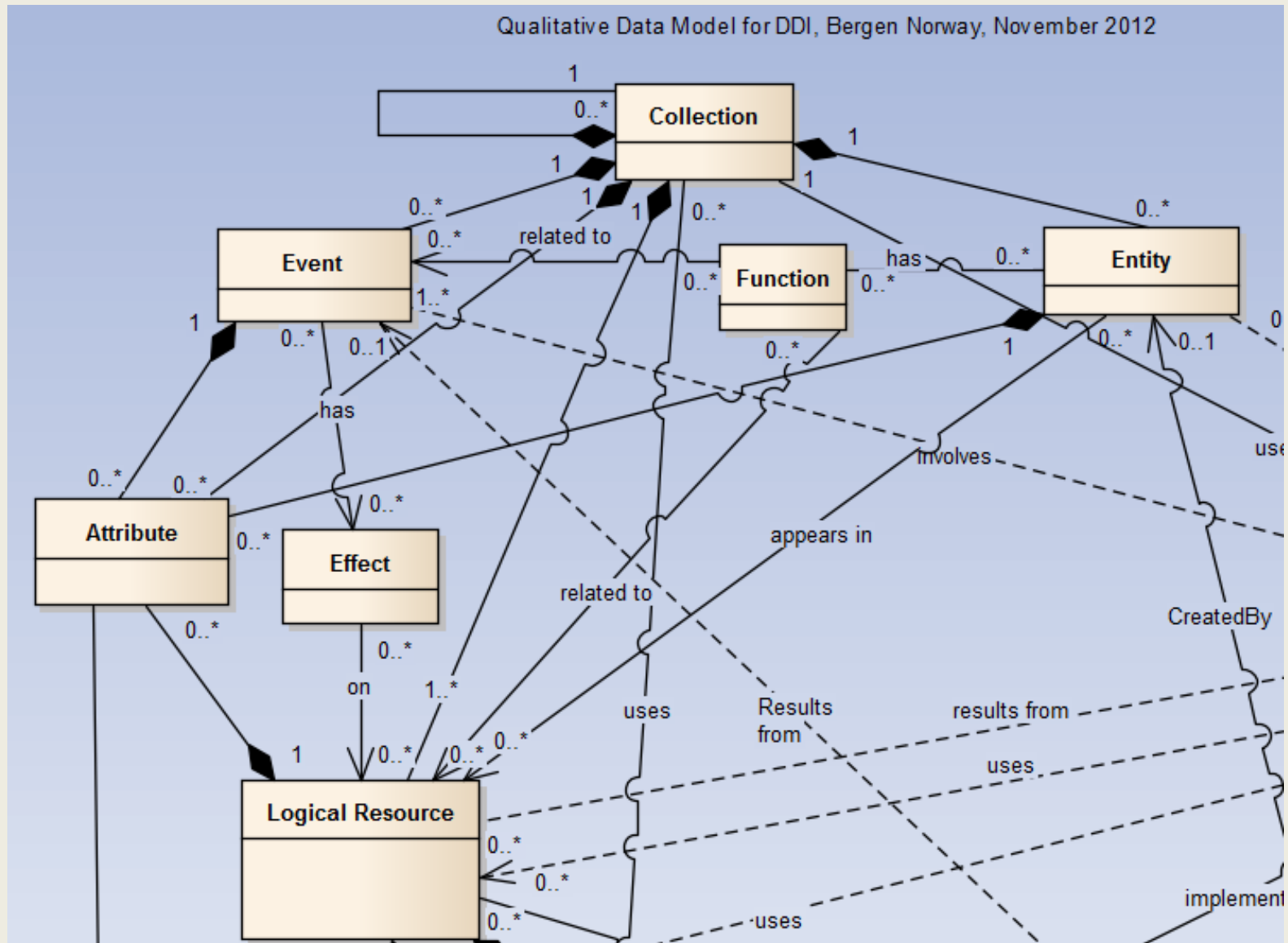


Segment Definition

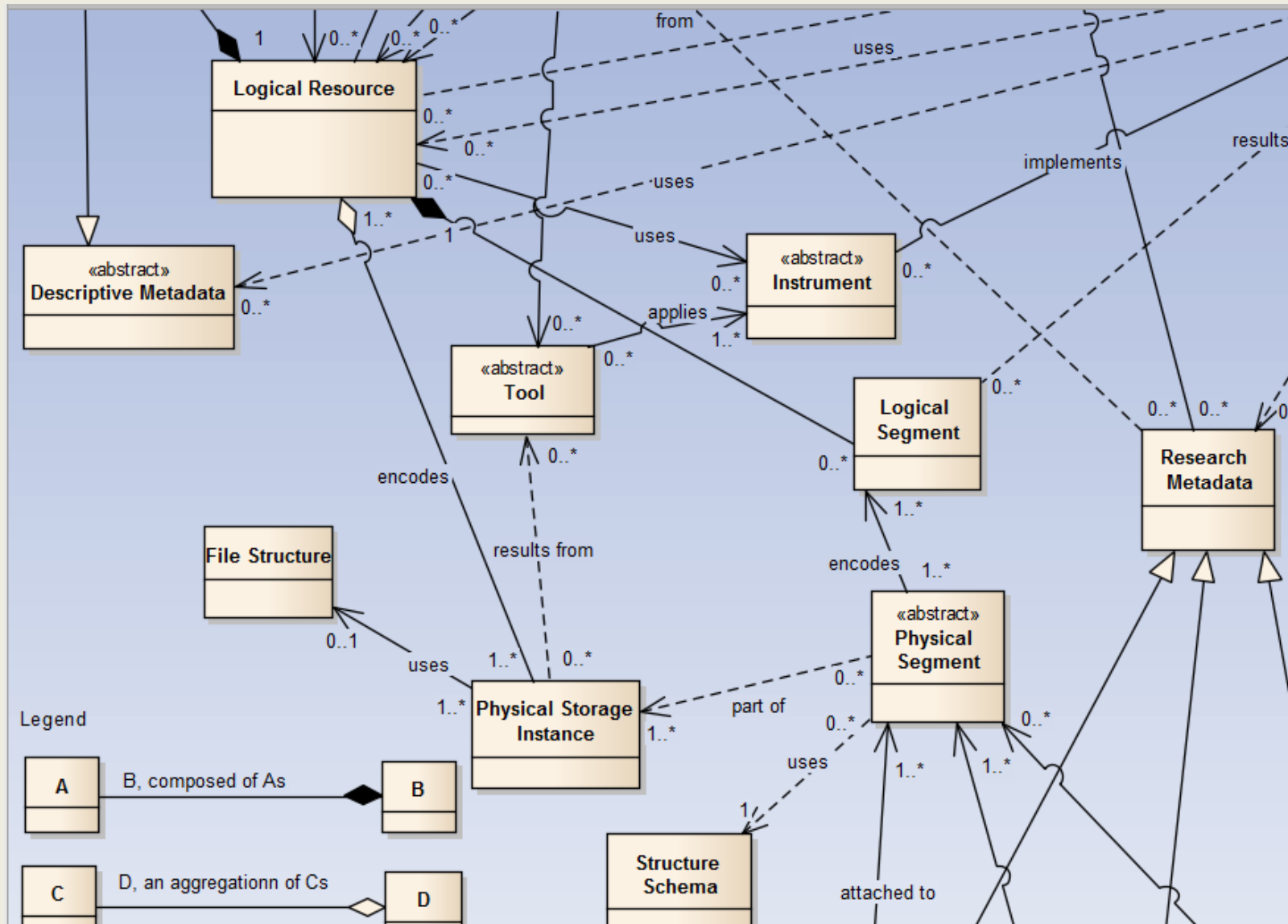
UML Modeling Elements



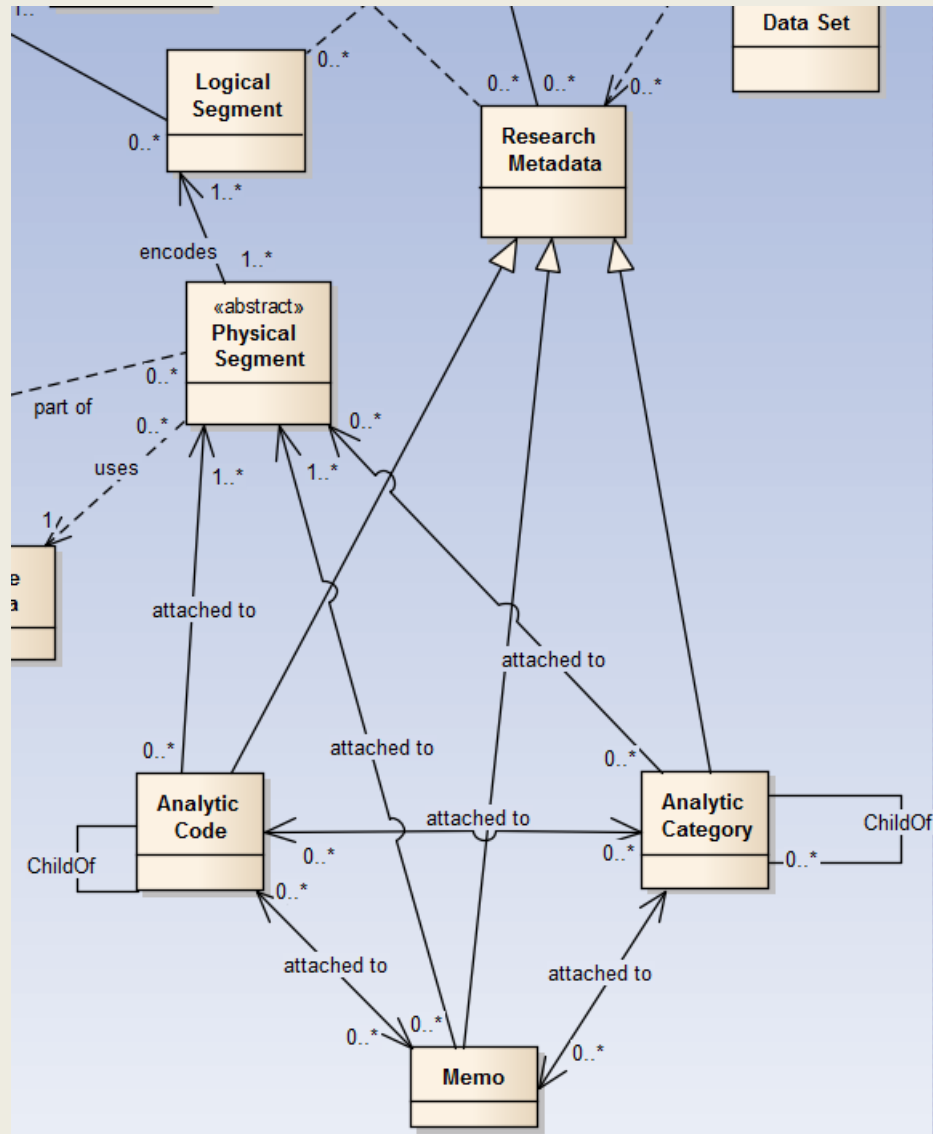
Model Components



Logical and Physical Segments



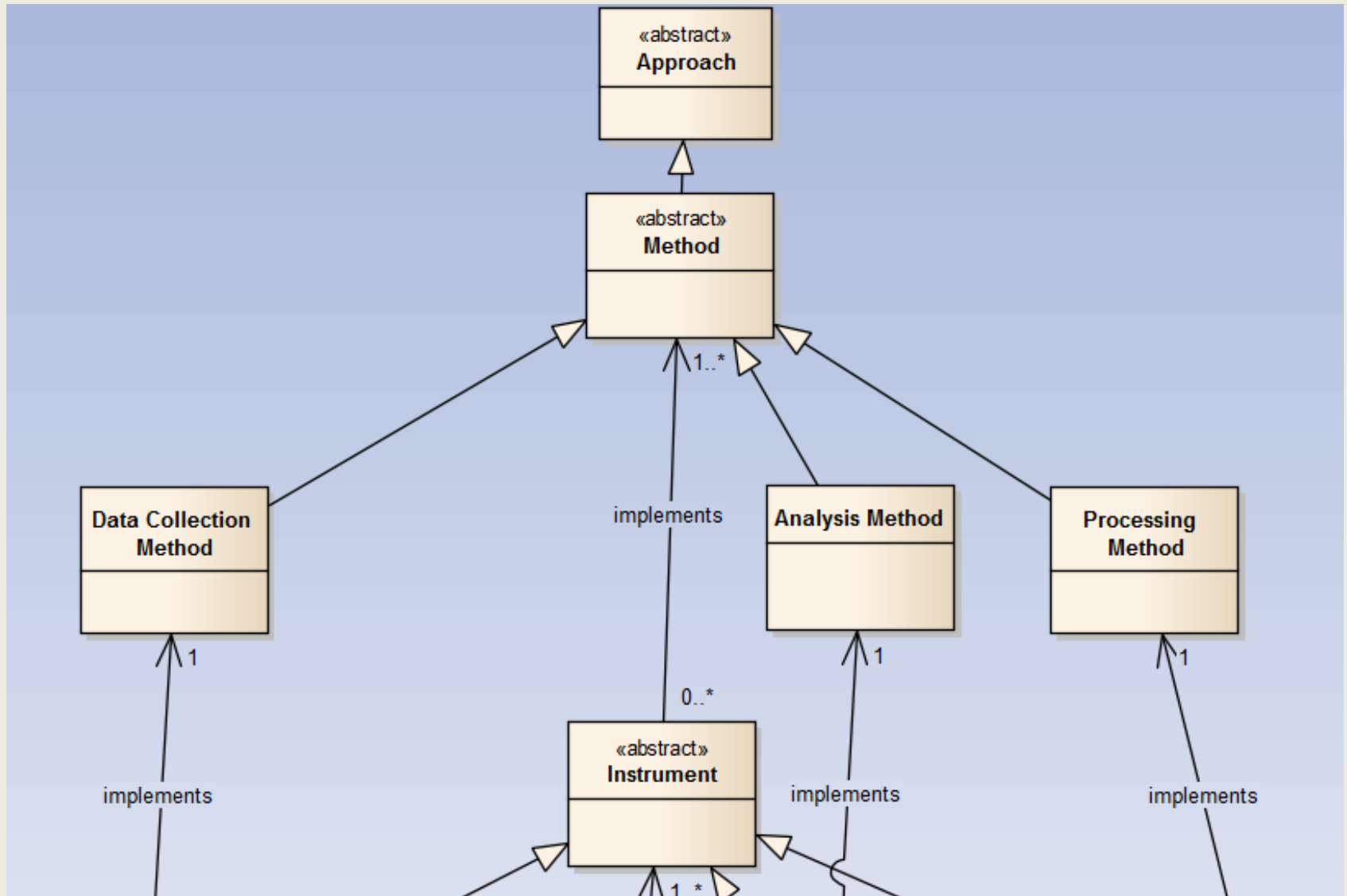
Codes, Categories and Memos



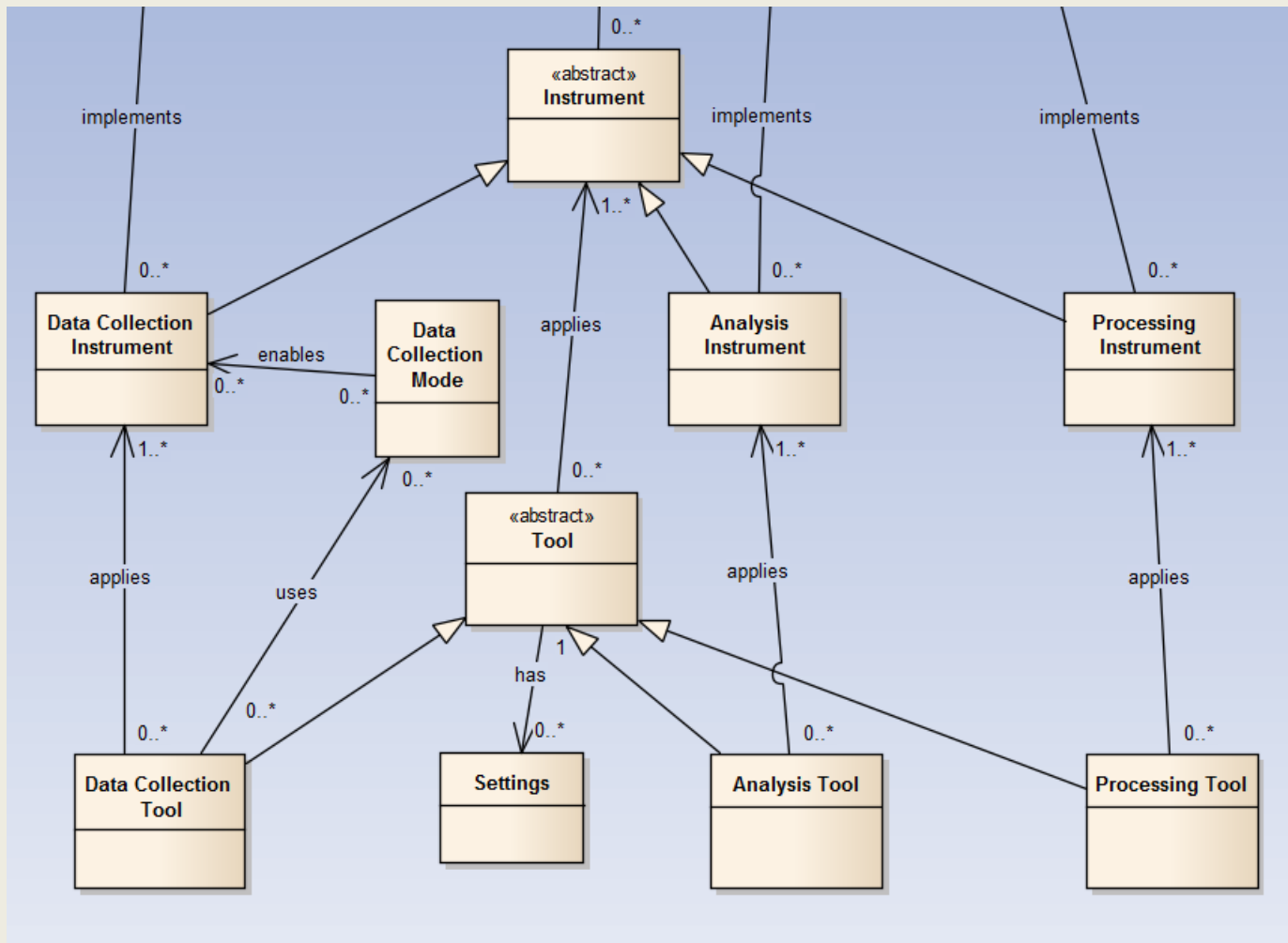
The diagram illustrates the following classes and their relationships:

- Collection**:
 - Related to **Function** (1 to 0..*).
 - Has **Entity** (1 to 0..*).
 - Related to **Method** (1 to 0..*).
- Function**:
 - Has **Entity** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).
- Entity**:
 - Involved in **Method** (0..* to 0..*).
 - Created by **Method** (0..* to 0..*).
 - Implements **Method** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).
- Method** (Abstract):
 - Results from **Instrument** (0..* to 0..*).
 - Results from **Tool** (0..* to 0..*).
 - Results from **Logical Segment** (0..* to 0..*).
 - Results from **Research Metadata** (0..* to 0..*).
 - Results from **Data Set** (0..* to 0..*).
- Instrument** (Abstract):
 - Used by **Method** (0..* to 0..*).
 - Applies to **Logical Segment** (1..* to 0..*).
- Tool** (Abstract):
 - Used by **Method** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).
- Logical Segment**:
 - Implements **Method** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).
- Research Metadata**:
 - Results from **Method** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).
- Data Set**:
 - Results from **Method** (0..* to 0..*).
 - Related to **Method** (0..* to 0..*).

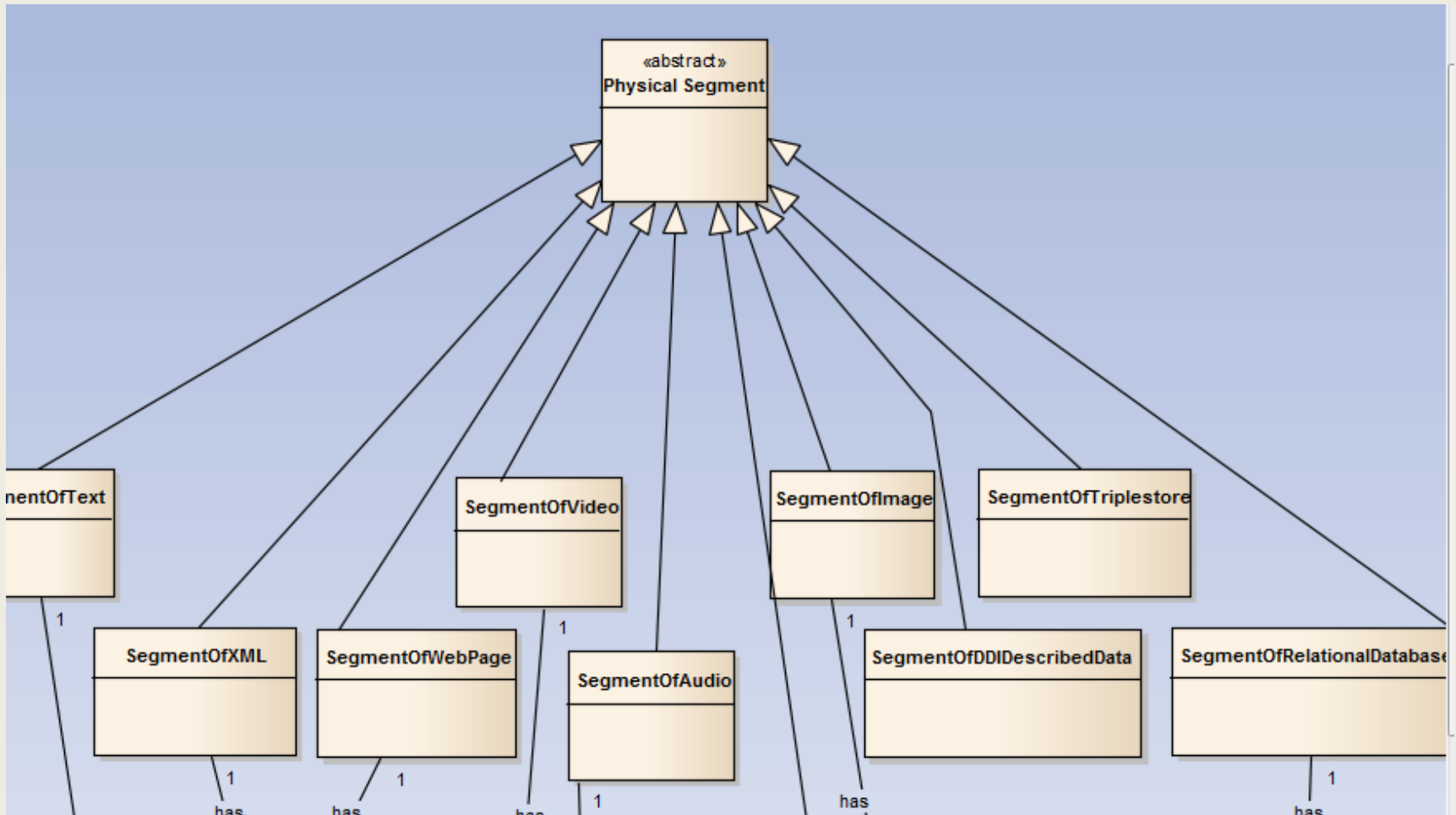
Methods



Instruments and Tools

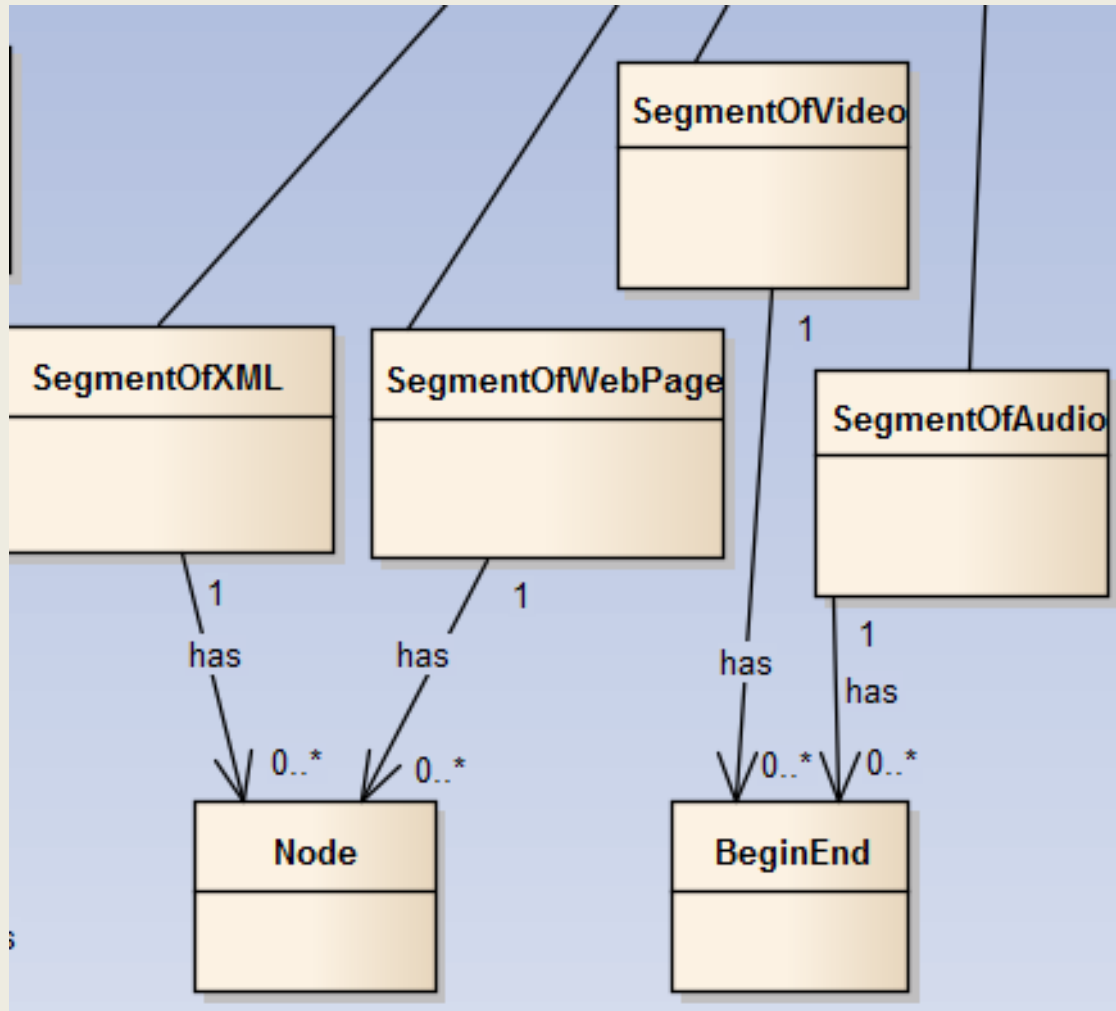


Defining Segments



Defining a segment of a qualitative object without changing the object.

Multiple Approaches Needed



Looking Forward

- DDI will, in the next major version, be a model-driven standard
- The model presented here will become an integrated part of that standard
- We hope that this will happen by the end of 2014 (!)
- If you are interested in joining this group, or finding out more about it, contact corti@essex.ac.uk or arofan.gregory@earthlink.net